

Inventor: Tsourikov, et al.
Serial No.: 09/991,079

Atty. Docket: 041685-0101 (IMCK-043)

Remarks

As noted previously, the Applicants appreciate the Examiner's thorough examination of the subject application. A Request for Continued Examination under 37 C.F.R. § 1.114 and a two-month extension of time under 37 C.F.R. § 1.136 are included with this paper.

Claims 1-19 are pending in the subject application. In the Office Action of 30 January 2006, the Examiner rejected claims 1-19, as described in further detail below. Claims 1 and 12 have been amended herein. No new matter has been added.

Applicants request reconsideration and further examination of the subject application based on the foregoing amendments to the claims and the following remarks.

Claim Rejections – 35 U.S.C. § 103

i. Claims 1-4, 8, and 11-15

Claims 1-4, 8, and 11-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,377,103 to Lamberti et al. ("Lamberti"). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

One requirement for a rejection under 35 U.S.C. § 103(a) is that the cited reference(s) teach or suggest each and every limitation of the claim(s) at issue. In this situation, Lamberti fails to teach or suggest each limitation of amended claims 1 and 12, the independent claims in the application.

Amended claim 1 recites the following (the method of claim 12 has been amended similarly):

I. A system enabling a user to ask a question (query) and for providing the user with one or more answers or solutions to such question, the system comprising:

user apparatus for generating first signals representative of a natural language user query that includes at least a query elements(A-O), (S-A), or (S-X-O), or element(S);

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a server for storing a knowledge base of semantically processed information including a plurality of S-A-O's and for identifying at least one knowledge base element S, O, or A, or elements (A-O) associated with a respective knowledge base S-A-O that includes the query elements or element in response to the server receiving the first signals, and generating second signals representative of the natural language answer S-A-O that includes the identified element or elements and the query elements or element, the user apparatus generating a natural language audio response or visual display to the user of the natural language answers S-A-O in response to receiving the second signals; and

means for transmitting the first signals from the user apparatus to the server and for transmitting the second signals from the server to the user apparatus.

[Emphasis added]

In contrast, Lamberti is directed to a computer that includes a data/knowledge base with a plurality of entries and further employs a user/computer interface for responding to a natural language form input. See Lamberti, col. 3, lines 38-40. Lamberti employs a syntactical based search method, for example:

parsing a user's natural language input into a case frame structure; filtering the case frame structure into a goal-expression that comprises a verb and remaining syntactical portions of the natural language input; providing each data/knowledge base entry with a goal-expression data structure that indicates a functional characteristic of the data/knowledge base entry; comparing the goal-expression with the goal-expression data structures to determine a match or matches; and paraphrasing the found matching goal-expression data structure or structures into a natural language-form and communicating the paraphrase or paraphrases to the user.

[Emphasis added]

Lamberti does not teach a database including semantically processed information as recited in amended claim 1, but rather teaches "a context-browsing capability for a computer wherein the computer uses a constrained natural language query input to search an internal 'help' systems

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knowledge base for all instances of a match between a user query and an action or accompanying object represented in the knowledge base.” Lamberti, col. 4, lines 4-9. Applicants submit that Lamberti further teaches a system that enables a user to access a preprocessed database of predetermined standard answers to a predetermined set of user queries:

Constrained natural language query syntax is based on the system's internal structure within the knowledge base, thereby enabling direct one-to-one matches . The format represents the user's query as a “goal-expression” that specifies a predicate or verb name, representing an action or goal, followed by arguments representing other direct or indirect objects involved in the action.

(col. 4, lines 10-17) [Emphasis added]

Applicants have contemplated such systems in the Background section of the subject application and have distinguished over such in the claims, e.g., amended claim 1, by among other things reciting the limitation of “a server for storing a knowledge base of semantically processed information including a plurality of S-A-O's and for identifying at least one knowledge base element S, O, or A, or elements (A-O) associated with a respective knowledge base S-A-O that includes the query elements or element in response to the server receiving the first signals.”

Thus, Lamberti fails to teach or suggest each and every limitation of claim 1 and, therefore, is an improper basis for a rejection of claims 1-4, 8, and 11-15 under 35 U.S.C. § 103(a). The rejection should be withdrawn accordingly.

ii. Claims 5-7, 9-10, and 16-19

Claims 5-7, 9-10, and 16-19 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Lamberti as applied to claim 2, and further in view of U.S. Patent No. 5,748,974 to Johnson (“Johnson”). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

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As noted previously Lamberti is directed to a computer that includes a data/knowledge base with a plurality of entries and further employs a user/computer interface for responding to a natural language form input, and fails to teach or suggest at least one limitation of claim 1, from which claims 5-7, 9-10, and 16-19 directly or indirectly depend.

In further contrast with the claimed invention, Johnson is directed to a multimodal natural language interface that enables users to combine natural language (spoken, typed, or handwritten) input selected from an application the user is running to perform a task in another application without leaving the current application. See Johnson, col. 1, line 66 through col. 2, line 5.

While Johnson mentions semantic interpretation (e.g., col. 2, lines 8-11), Johns fails to teach or suggest the deficiencies in Lamberti as noted above, e.g., the teaching of "a server for storing a knowledge base of semantically processed information including a plurality of S-A-O's and for identifying at least one knowledge base element S, O, or A, or elements (A-O) associated with a respective knowledge base S-A-O that includes the query elements or element in response to the server receiving the first signals," as recited in claim 1.

Thus, the cited combination of Lamberti and Johnson fails to teach or suggest each and every limitation of claims 1 and 12, which are the base claims for the claims under the rejection. The rejection of claims 5-7, 9-10, and 16-19 is consequently without proper basis and should be withdrawn accordingly.

Conclusion

In view of the amendments and remarks submitted herein, Applicant respectfully submits that all of the claims now pending in the subject application are in condition for allowance, and requests a Notice of Allowance for the application.

If a telephone conference will expedite prosecution of the application, the Examiner is invited to telephone the undersigned.

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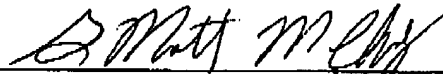
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Authorization is hereby given to charge our deposit account no. 50-1133, for any fees required for the prosecution of the subject application.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

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